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ABSTRACT

This manual describes a systematic approach to designing, implementing, and evaluating public fire education programs. An introductory section discusses use of the planning process that has a starting point and five basic steps. The second section focuses on the starting point--establishing responsibility in two major areas as well as administrative or policy responsibility and staff or program responsibility. The next five sections each cover one of the five steps. Materials provided for each step are an objective; activities that involve gathering and organizing information, materials, and resources; and a decision (review, summarization of, and action on the information). These five steps are described: (1) identification of major local fire problems, (2) selection of program objectives that meet the community's needs and resources, (3) design of the educational program package, (4) implementation of the educational program designed for the community's specific needs and resources, and (5) evaluation of the program's impact. Appendixes include a summary of the Oregon experience in using the Public Fire Education Planning process and worksheets, both a completed sample and a blank form of each one. (YLB)

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PUBLIC FIRE EDUCATION PLANNING

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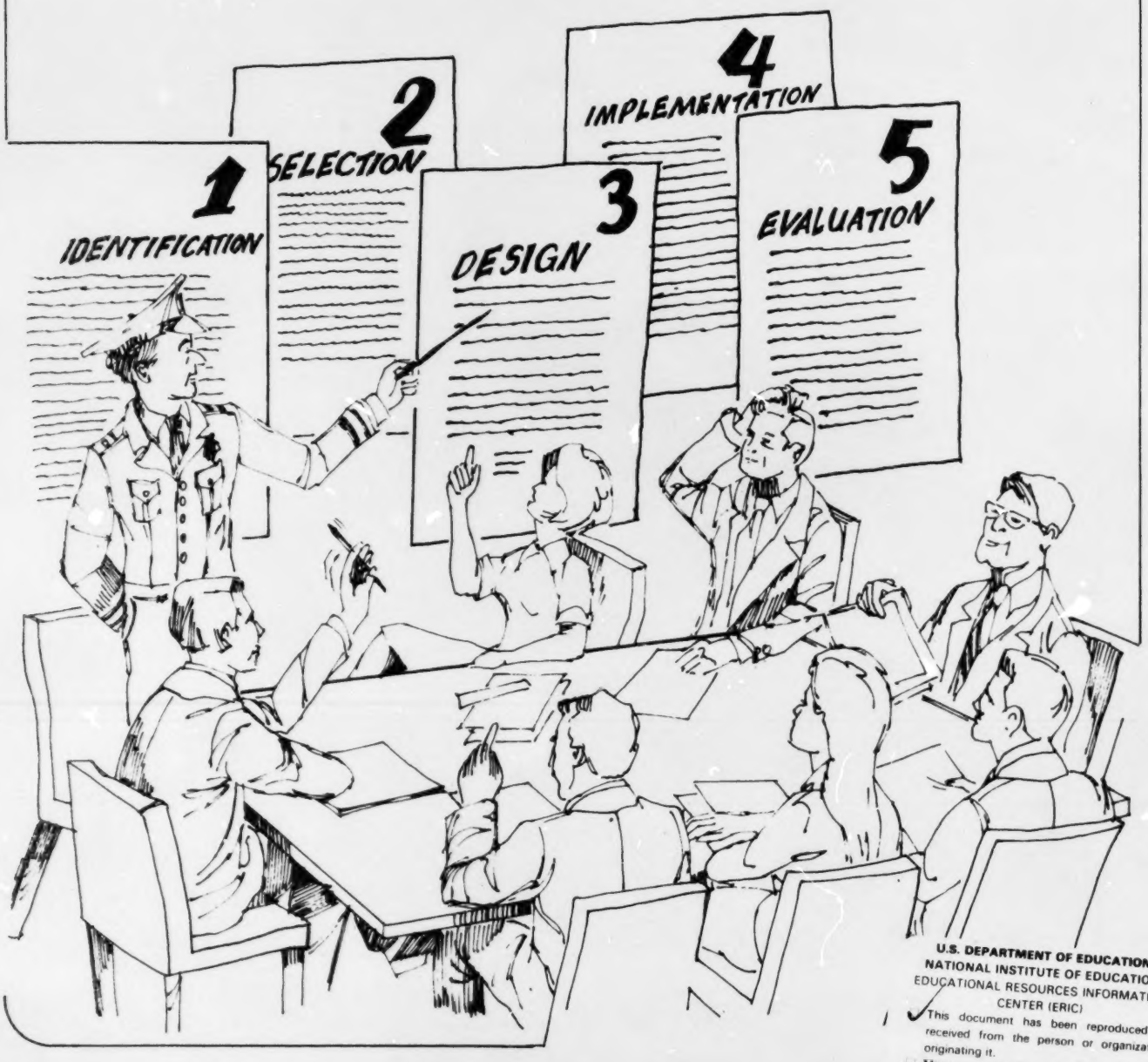
A five step process

FEDERAL EMERGENCY MANAGEMENT AGENCY
United States Fire Administration
Office of Planning and Education



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A five step process

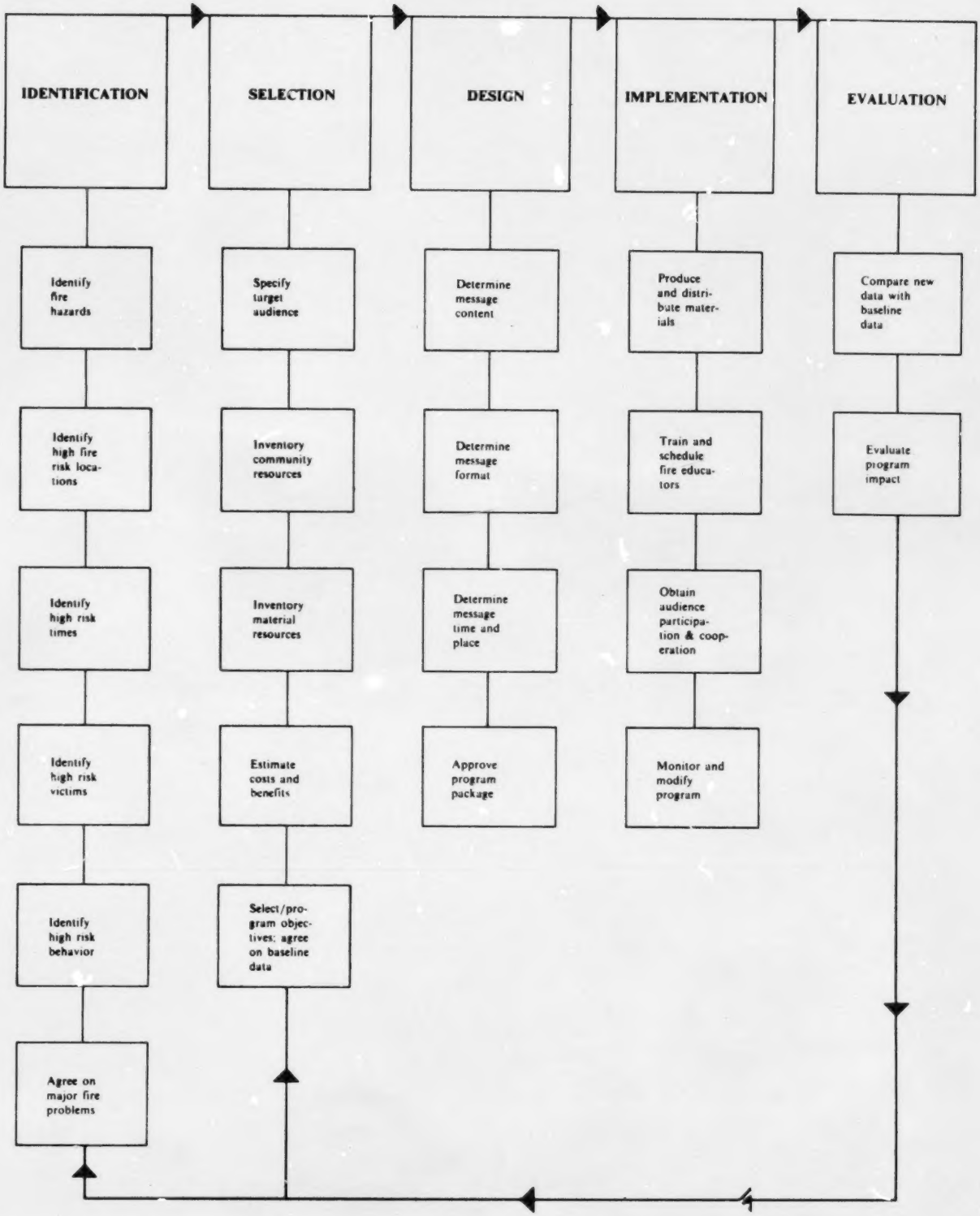


TABLE OF CONTENTS

USING *PUBLIC FIRE EDUCATION PLANNING* 4

STARTING POINT: Establish Responsibility 6

STEP ONE: IDENTIFICATION 8
- Activities: Identify fire hazards
  Identify high risk locations
  Identify high risk times
  Identify high risk victims
  Identify high risk behavior
- Decision: Agree on major fire problem(s)

STEP TWO: SELECTION 16
- Activities: Specify target audience
  Inventory community resources
  Inventory material resources
  Estimate costs and benefits
- Decision: Select program objectives; agree on baseline data

STEP THREE: DESIGN 22
- Activities: Determine message content
  Determine message format
  Determine message time and place
- Decision: Approve program package

STEP FOUR: IMPLEMENTATION 27
- Activities: Produce and distribute materials
  Train and schedule fire educators
  Obtain audience participation and cooperation
- Decision: Monitor and modify program

STEP FIVE: EVALUATION 32
- Activity: Compare new data with baseline data
- Decision: Evaluate program impact

APPENDIX I, THE OREGON EXPERIENCE 38

APPENDIX II, FIRE EDUCATION PLANNING WORKSHEETS 40

USING PUBLIC FIRE EDUCATION PLANNING

Public Fire Education Planning combines two essential ingredients. One ingredient is the planning *Process*, while the second, equally important ingredient is the *People* who complete the process.

THE PROCESS

The planning process has a starting point and five basic steps: Identification, Selection, Design, Implementation, and Evaluation. Within each step are *Activities* and a *Decision*. The *Activities* involve gathering and organizing information, materials, and resources. In the *Decision* phase, the information is reviewed, summarized, and acted upon. Frequently the information, when displayed, will present a clear direction which the whole group can readily agree on because it represents the consensus of all their thoughts. In the end, clear objectives should be stated.

Starting Point: Establish Responsibility

A clear understanding of responsibilities is crucial to effective planning. There are two major areas of responsibility to be established: administrative or policy responsibility and staff or program responsibility. After deciding which people are responsible for which duties, the planning process can begin.

Step One: Identification

The Identification step involves identifying the most important local fire problems so that the fire education effort can focus on those specific problems. The *Activities* include gathering information on subjects ranging from the most frequent location of fires to high risk behavior. The *Decision* is to agree on the major fire problems in your community. Once the major local fire problems have been identified, effective solutions can be developed.

Step Two: Selection

While Identification defines a community's needs for fire education, Selection is an inventory of community resources available to meet those needs and selection of achievable objectives.

The *Activities* of Selection include conducting an inventory of community resources, available materials, and potential audiences, as well as estimating costs and benefits of different educational strategies. The *Decision* is selecting program objectives that meet your community's needs and resources.

Step Three: Design

The Design step moves the fire education process from planning towards implementation. The *Activities* of Design involve determining the specific content and format of fire safety messages and packaging the program for delivery to the community. The *Decision* is to outline and approve the education program package.

Step Four: Implementation

The fourth step is implementing the education program designed for your community's specific needs and resources. Implementation *Activities* include producing and distributing materials, training personnel, and involving target audiences in the education process. In addition, an organization or individual will monitor the program for smooth

day-to-day operation. The *Decision* is an agreement of exactly how the fire education program will be implemented, monitored and, if necessary, modified in your community.

Step Five: Evaluation

The final step is measuring the impact of the fire education program. Among the *Activities* are comparing baseline and new data on fire deaths, injuries, losses, and incidents. Old and new information on awareness, knowledge, and behavior in the community will also be compared. The *Decision* is to review the program's impact and determine its impact. If the program is successful, measures to illustrate its success should be explored. On the other hand, if the program is unsuccessful, it may be necessary to modify its focus. In this way, Evaluation returns you to the Identification or Selection steps to adjust your program.

Worksheets and a sample fire education plan have been included to assist you in completing the planning process.

THE PEOPLE

The way people complete the process is also important. Each step of the planning process has been carefully designed to help people make the maximum use of available resources. During each *Activities* phase, you should list on the worksheets as many different ideas and opinions as possible. Judgements should be deferred until all the information is in. Different viewpoints should be encouraged; they may lead you to fresh approaches which will be the key to a successful program.

When working as a group make sure that each person expresses his viewpoint in turn. Don't be satisfied with just one point of view from the group during this phase.

Both elements—the Process and the People—were seen at the Second National Public Fire Education Planning Conference held at Airlie. There, more than 60 fire educators were divided into groups to devise solutions to specific fire problems. Each group of approximately 10 people pooled their knowledge about a specific problem for each step in systematic planning. By negotiating approaches for each step, each group agreed on specific plans. At the end of the meeting, participants had learned the five-step process and had gained insights into working with each other.

The Airlie experience was a training session in Public Fire Education Planning. Oregon fire educators, on the other hand, have used the systematic process to plan statewide public education programs (see Appendix I, "The Oregon Experience"). Airlie participants and Oregon fire educators validated both the systematic planning process and the role of group dynamics in planning. Other educators are now using the five-step process for local planning.

STARTING POINT: ESTABLISH RESPONSIBILITY

- **Assign administrative and policy responsibilities.**
- **Assign staff responsibilities.**
- **Determine specific responsibilities for "Activities" and "Decisions".**

There are two kinds of responsibility in fire education planning. The first is administrative and/or policy responsibility which can include: (1) Providing a statewide perspective, (2) coordinating efforts with other agencies or organizations, and (3) gaining the support of influential agencies, organizations, or individuals.

The second responsibility involves "front-line" or staffing tasks. Included are: (1) Gathering information, (2) locating or preparing materials, and (3) carrying out the education program.

You may choose to have two separate groups be responsible for the two kinds of tasks. One group, the Fire Education Committee, may have administrative/policy responsibility while another group, the Fire Education Planning Team, has staff responsibility. Another option for utilizing both groups is to assign "Activities" to the Fire Education Planning Team and "Decision" to the Fire Education Committee. See Appendix I, "The Oregon Experience," to learn how one state assigned responsibilities.

Some fire educators may find themselves fulfilling both the

staff and administrative/policy roles. Whether these two functions are performed by two groups or by one, it is important that the staff duties of the Planning Team and the administrative/policy duties of the Committee be carried out.

Broad representation from the community is a cornerstone for the success of both groups. Fire education must be a community effort, which includes fire service, schools, community service groups, medical personnel and the local media to help develop community support for fire education. In particular, people from key community groups and the target audiences have influence and information to contribute to the education process.

Those who are beginning statewide public fire education planning, as opposed to community level planning, will need the support of statewide fire service organizations and agencies, forestry, departments of public instruction, etc. Often, local level people will contact their state level counterparts on behalf of statewide public fire education planning.

STEP ONE: IDENTIFICATION

Objective: To identify major local fire problems.

Effective public fire education programs begin with identifying major local fire problems. Then, community resources can be used to solve those specific problems. There are many ways to obtain the information necessary to identify major fire problems. The USFA's National Fire Incident Reporting System (NFIRS) is a very useful resource for Identification. Purely local efforts can also be successful in pinpointing local fire problems.

In Seattle, Wash., for example, a census-tract-by-census-tract analysis of fire incidents pinpointed a few specific neighborhoods as high risk locations. As a result, home inspections and other educational programs were concentrated in those neighborhoods.

This approach is not only effective, but more economical than scattering Fire Department resources throughout the city. Targeting public fire education programs in this way is recommended throughout this manual. Identification of specific fire problems is the first step toward an effective solution.

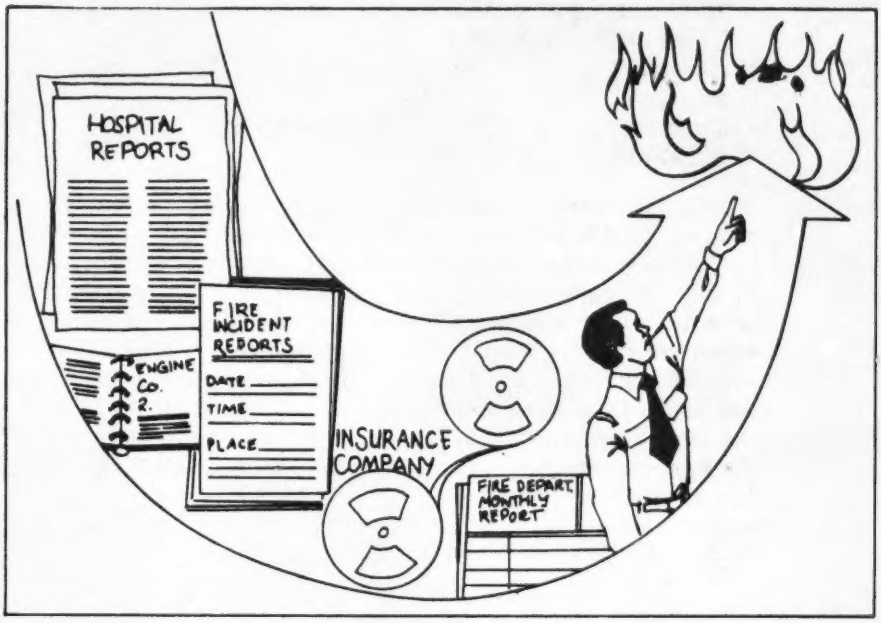
ACTIVITY: IDENTIFY FIRE HAZARDS

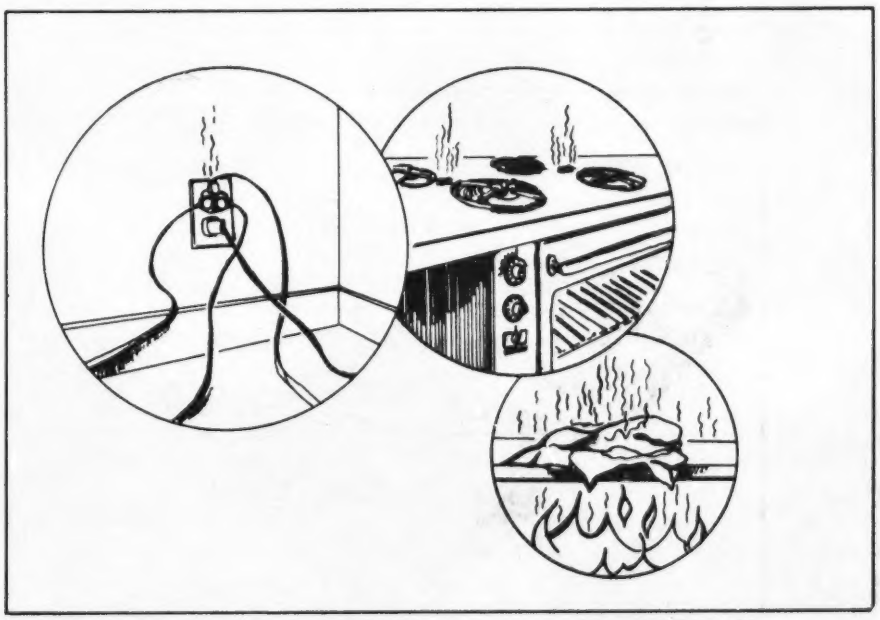
- **Locate records showing causes of fires.**
- **Select most frequent causes of fires.**
- **Determine local patterns of fires.**

Records from the National Fire Incident Reporting System (NFIRS), the State Fire Marshal, local Fire Departments, hospital and ambulance services, the coroner's office, and insurance data will help the fire educator determine local fire hazards.

This information is important because it can identify the specific local patterns of fires which should be addressed by your public education program. In Mississippi County, Ark., for example, the Identification phase of a fire education project revealed bad wiring and overloaded circuits as hazards in that county. Those responsible for the education program focused community attention and effort on electrical problems, reducing fire losses by 50%. In Upper Arlington, O., where youthful firesetters are among the main causes of fire, the local Fire Department set up a successful counseling service with community psychologists.

When the most important local fire hazards are identified, a program can be directed toward these specific problems with a higher probability of achieving measurable loss reduction.





IDENTIFY FIRE HAZARDS

ACTIVITY:
IDENTIFY HIGH RISK LOCATIONS

- **Locate neighborhoods or building occupancy types with high fire risks.**
- **Discover what is causing the risks to be above average.**
- **Concentrate programs and personnel in high risk locations.**

Certain neighborhoods can be "high risk" in terms of fire dangers. This is especially true in urban areas, where deterioration or "blight" has set in. These neighborhoods can be identified by plotting the locations of fire incidents on a map, as in New Orleans, where educators found "migrations" of fire incidents within the city.

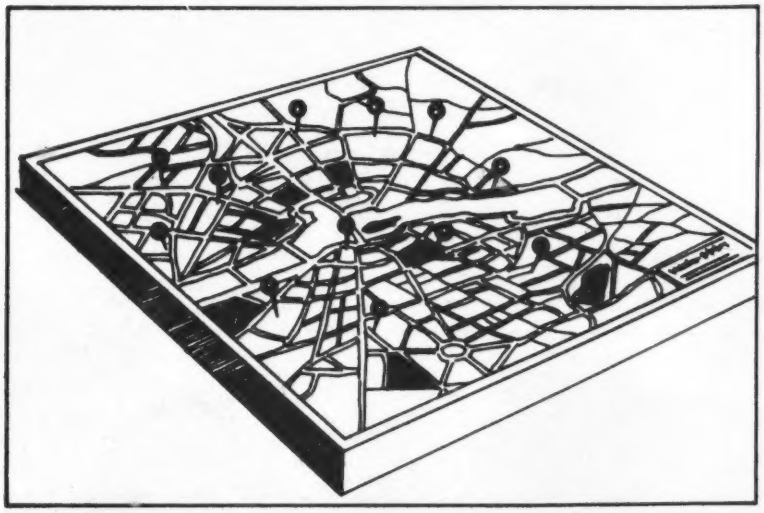
In Chicago, the "Operation Pride" home inspection program operated in the three census tracts with the city's highest fire incident rates. Where rubbish was a major Chicago fire hazard, the Fire Department cooperated with the Department of Sanitation to have special pick-ups in the high risk areas. This approach requires that fire educators learn a great deal about local community needs and problems.

In identifying high risk locations, it is helpful to remember that:

1) "High risk locations" can be neighborhoods or building occupancy types with high fire rates (the number of fires per capita) or high fire incidence (the absolute number of fires).

2) Fire educators working in high risk locations confront other community problems, in addition to a high fire risk.

3) Flexibility and cooperation with other city agencies will help fire educators achieve their mission.



IDENTIFY HIGH RISK LOCATIONS

ACTIVITY: IDENTIFY HIGH RISK TIMES

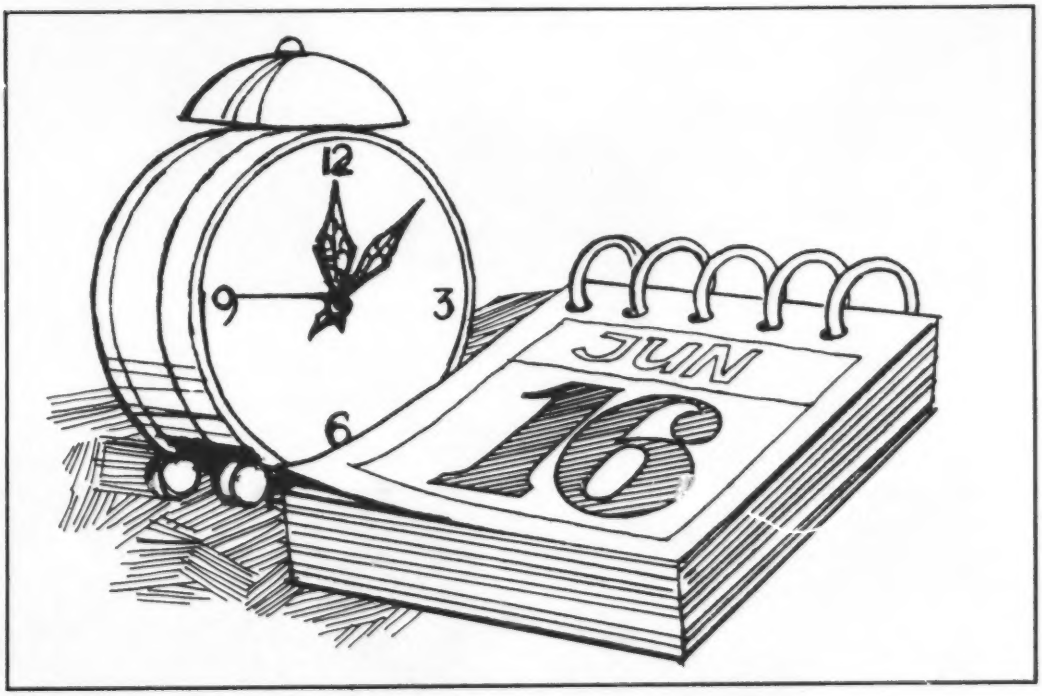
- **Identify times of day, week or year with highest fire loss incidence.**
- **Identify types of fires occurring at these times.**
- **Plan to concentrate fire safety messages at these times.**

Common sense tells us that a Christmas fire prevention campaign should be launched in December and not in July. In the same way, a radio spot about cooking fires should be broadcast in the early morning or early evening, when most of these fires occur.

Fire dangers increase at certain times of the day and of the year. Local fire educators should identify these high risk times, then organize programs that will alert people to times of high fire danger.

Los Angeles County is a good example of using knowledge about high risk times. During dry spells, the Fire Department dispatches apparatus to strategic places when school is dismissed in the afternoon. This action cuts down on brush fire incidents, which are often started by children on their way home from school.

"High risk times" can become moments of opportunity if the right actions are taken then.



IDENTIFY HIGH RISK TIMES

ACTIVITY: IDENTIFY HIGH RISK VICTIMS

- **Identify groups with high fire death and injury rates.**
- **Determine why they have a high fire rate.**
- **Involve these groups in the fire education effort.**

Fire is more hazardous to some people than to others. The very young, the very old, and non-white males, for example, suffer more fire fatalities proportionately than any other age groups nationwide.

The identity of high risk victims depends on the local situation. When the people at the greatest risk have been identified, programs directed to them can be designed. The potential victims should be involved in the fire education effort.

A demonstration program in Robeson County, N.C., for example, found that American Indians were the most frequent victims of flammable liquid fires. A program was designed to meet their needs, and the burn injury rate dropped by 65 percent.

High risk victims—and those people who are close to potential victims—greatly need fire education. But in any given community, they must be identified before education and communication can begin.

ACTIVITY: IDENTIFY HIGH RISK BEHAVIOR

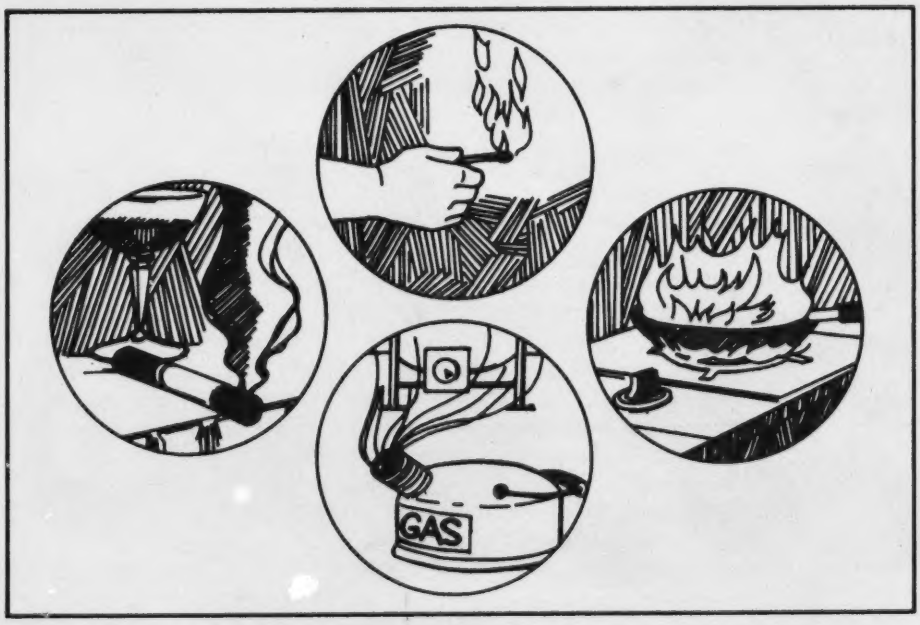
- **Determine which behavior—acts or omissions—causes fires.**
- **Decide how the behavior can be changed.**
- **Teach the people exactly what to do.**

A person's actions or omissions, either before or after ignition, are often the most important single factors in a fire incident. Discovering these behavior patterns is often difficult, but the information can prove very valuable to the fire educator.

After obtaining this information, the fire educator will decide where to intervene in the dangerous behavior. In the South, for example, children standing too close to space heaters and igniting nightgowns has long been a problem. Here, intervention can occur by educating parents and children about the danger, recommending the purchase of flame resistant clothing, and/or teaching children what to do if their clothing ignites.

Fire educators realize that fires are not caused by flammable liquids or smoking materials. Fires are caused by the way people deal with these agents. For this reason, fire education programs cannot afford to overlook the relationship between human behavior and fire and burn hazards.

IDENTIFY HIGH RISK VICTIMS



IDENTIFY HIGH RISK BEHAVIOR

DECISION: AGREE ON MAJOR FIRE PROBLEM

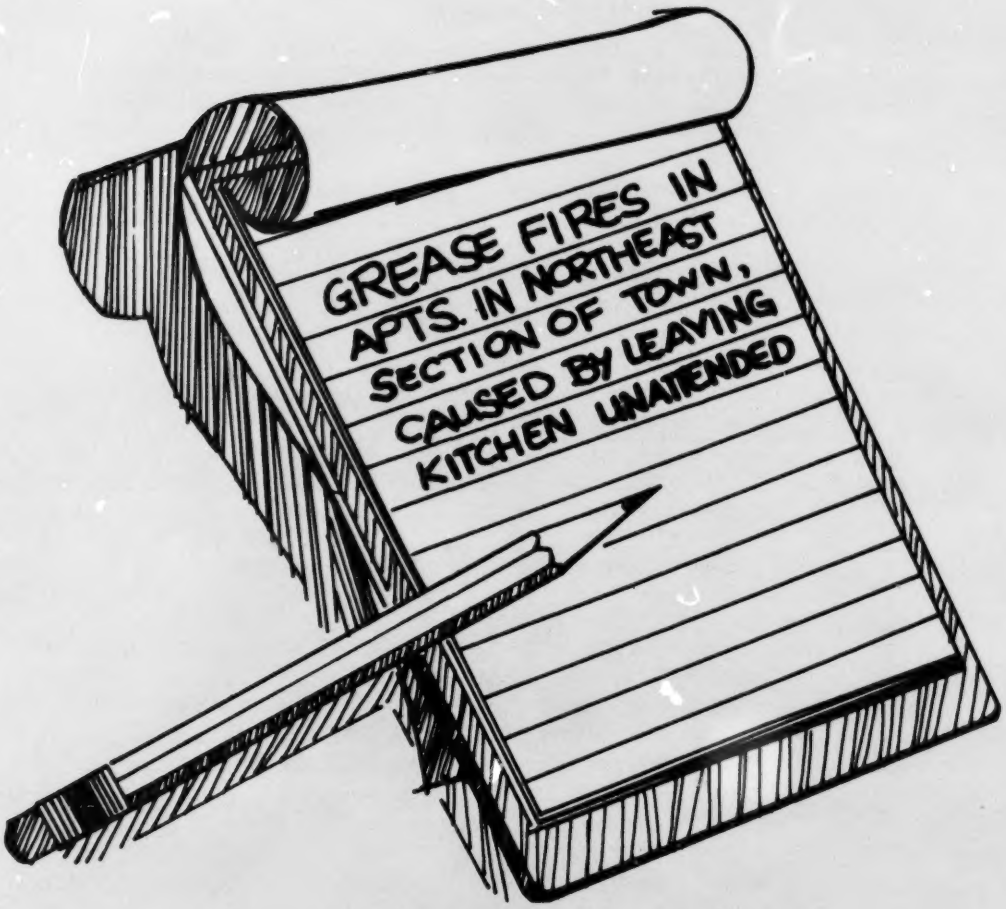
- **Review information on major fire problems.**
- **Determine which local fire problem is the *most* serious.**
- **Create "scenarios" of how fire happens.**

The information gathered during Identification will probably reveal several serious fire problems. The task now is to choose the problem which, if solved, would have the greatest impact on the local fire situation. The fire educator may wish to determine which problem is the most serious in terms of (1) fire incidence, (2) fire deaths, (3) fire injuries, and (4) fire loss.

The next step is to create a "scenario" or mental image of how the fire happens. The scenario can be made from the information gathered during Identification activities, from a detailed study of local fire data, or from an in-depth investigation (including human behavior) of selected fire incidents. The scenario will help identify target audiences and strategies for reaching them.

Hypothetical scenarios include:

1. "Children aged 10 and below (high risk victims) setting fires (high risk behavior) in apartment trash rooms, especially in the northeast section of town (high risk location), after school hours (high risk time)."
2. "Adult females (high risk victims) leaving the kitchen unattended during meal preparation (high risk behavior and high risk location), especially when preparing breakfast in the morning (high risk time)."
3. "Adult males (high risk victims) smoking in bed while under the influence of alcohol (high risk behavior and location)."



AGREE ON MAJOR FIRE PROBLEMS

16

STEP TWO: SELECTION

Objective: To select the most cost-effective objectives for your fire education program.

When the most serious local fire problems have been clearly identified, a strategy to solve those problems can be selected. Depending on local resources, the fire education strategy might emphasize mass media, in-school programs, or community-wide fire education.

In Cincinnati, for example, the Shriners' Burns Institute has concentrated on training teachers in fire safety. This strategy is aimed at having maximum impact for minimal cost by reaching many children through a few teachers. In Los Angeles, where it is not feasible to reach all the schools, the Fire Department emphasizes working through the local television stations.

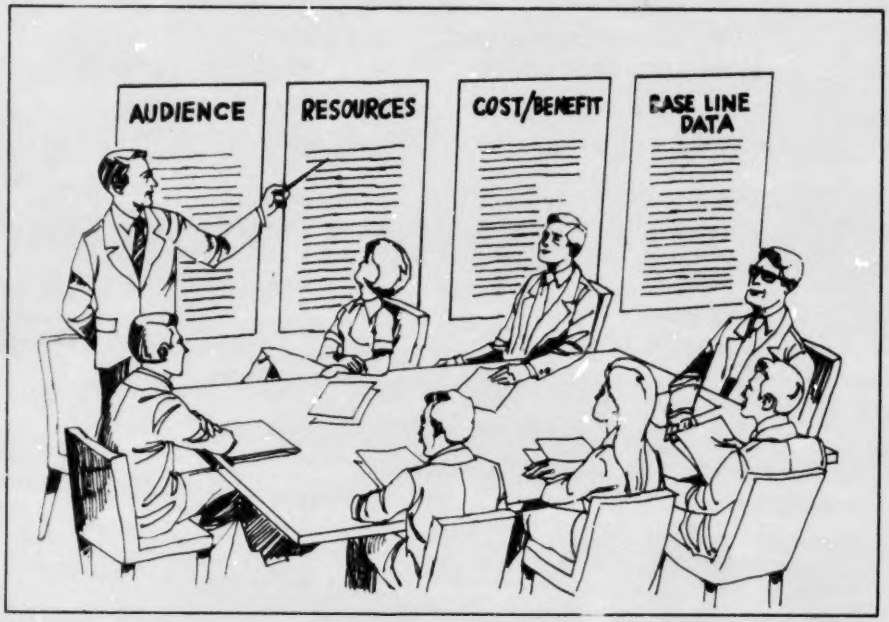
The basic idea is to review the local situation and to chose the strategy with the greatest potential effect at the lowest cost.

ACTIVITY: SELECT TARGET AUDIENCES

- **Review the high risk victims identified in Step One.**
- **Identify those who influence the high risk victims.**
- **Select the audience with the greatest potential impact.**

Selecting the target audience for your fire education program can be the key to its success. It is important to remember, however, that the target audience may not be the people identified as high risk victims in Step One. Those who influence the potential victims are a possible audience. For example, school children, the school board, the superintendent, the principal or a teacher may also be your audience.

In working with the elderly, you may decide that a program aimed directly at retired persons or at their social organization is the best approach. On the other hand, you may decide that the elderly-related fire problems are tied to their housing environment and that your target audience should be people who can pass and enforce codes or managers and nurses at local health care facilities.



IDENTIFY TARGET AUDIENCE

ACTIVITY:
INVENTORY COMMUNITY RESOURCES

- **Identify influential people in the community.**
- **List all local media and civic organizations.**
- **Make personal contact with key people and groups.**

A "community resource" is anything or anyone who can transmit or help transmit fire safety messages to the public—local television and radio stations, newspapers, civic groups, schools and community organizations, and influential individuals. Once these community delivery systems have been identified, the most effective one can be chosen for the fire education program.

In Santa Ana, Calif., for example, the local Kiwanis Club was one of the first organizations to support public fire education. In Boston, a local radio station has recently begun a series on arson. In Erie, Pa., the Jaycees are conducting a smoke detector program.

In developing an inventory of community delivery systems, the fire educator should remember that:

1) Local broadcasters are required by the Federal Communications Commission to render services to the communities in their license area. Station managers will often help a well planned fire education project.
2) Local civic groups seek worthwhile community projects and have traditionally been sources of funds and people for fire education projects.
3) Effective communications is a two-step process. Messages transmitted through the media have the greatest effect when reinforced by local community leaders.

INVENTORY COMMUNITY RESOURCES

ACTIVITY:
INVENTORY MATERIAL RESOURCES

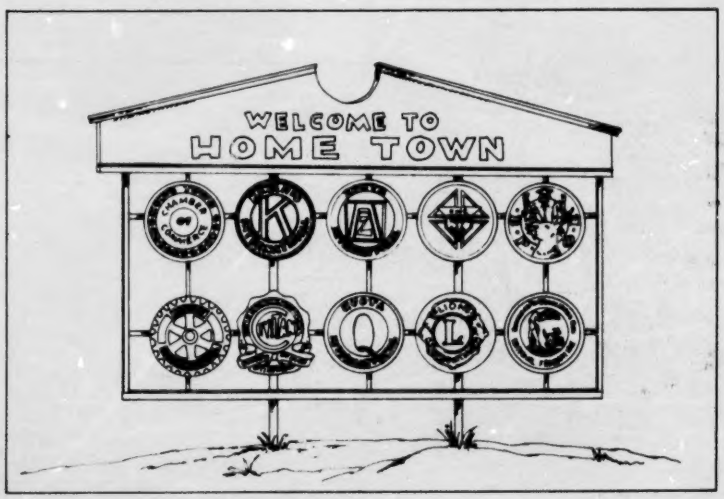
- **Ask local businesses and organizations what materials, equipment, or skills they could donate to your program.**
- **Determine availability and cost of fire education materials.**
- **Review existing programs and determine the advantages of purchasing educational materials versus making your own.**

Most communities have the resources to create the fire safety materials needed to conduct a public fire education program. An inventory of these resources should determine both availability and cost to the planned fire education program. In Guilford County, N.C., for example, a local business supplies decals to the County Fire Marshal's office for about 1 cent as opposed to the 5-10 cent commerical rate.

In conducting the inventory of material resources, the local fire educator shold remember that:

1) Large companies often employ highly skilled graphic artists and other professionals whose time is frequently loaned to community projects as a public service.
2) Shopping centers, fast food stores, and civic clubs are always looking for interesting projects to sponsor.
3) Schools and other organizations often have audio-visual equipment (such as slide projectors) which can be used for fire education projects.

Descriptions of community-developed education programs are available from the Public Education Office, USFA . Excellent commercial materials are available from several sources, including the National Fire Protection Association, Film Communicators, Inc., and the Hartford Insurance Company.



INVENTORY MATERIAL RESOURCES

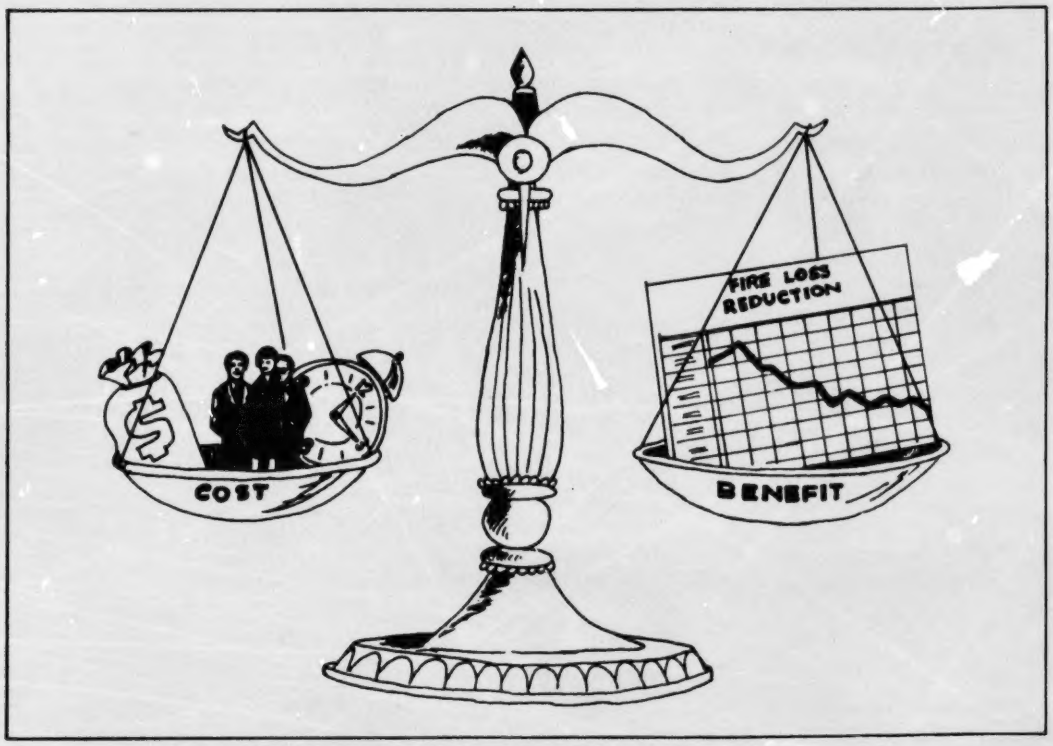
ACTIVITY: ESTIMATE COSTS AND BENEFITS

- **List alternative program objectives.**
- **Estimate costs of alternative program objectives.**
- **Estimate loss reduction impact of each program objective.**
- **Choose the most effective approach within limits of local resources.**

The most effective fire education programs are targeted campaigns based on clear objectives and program strategies. Comparing expected costs to expected benefits will help in choosing the best strategy.

A cost-benefit analysis can demonstrate the effectiveness of public fire education. In Louisiana, for example, it was estimated that the Forest Service's "personal contactor" program prevented 310 fires a year at a cost of $24 per fire; the savings in fire loss exceeded the cost of the program.

A cost-benefit estimate will not tell the fire educator which objective or strategy to choose, but it will demonstrate the probable impact of different choices. For example, residential fires usually have lower dollar losses per fire than industrial fires. But many more lives are lost in residential fires. If it costs the same to prevent both types of fires, which would you, as a fire educator, emphasize?



ESTIMATE COSTS AND BENEFITS

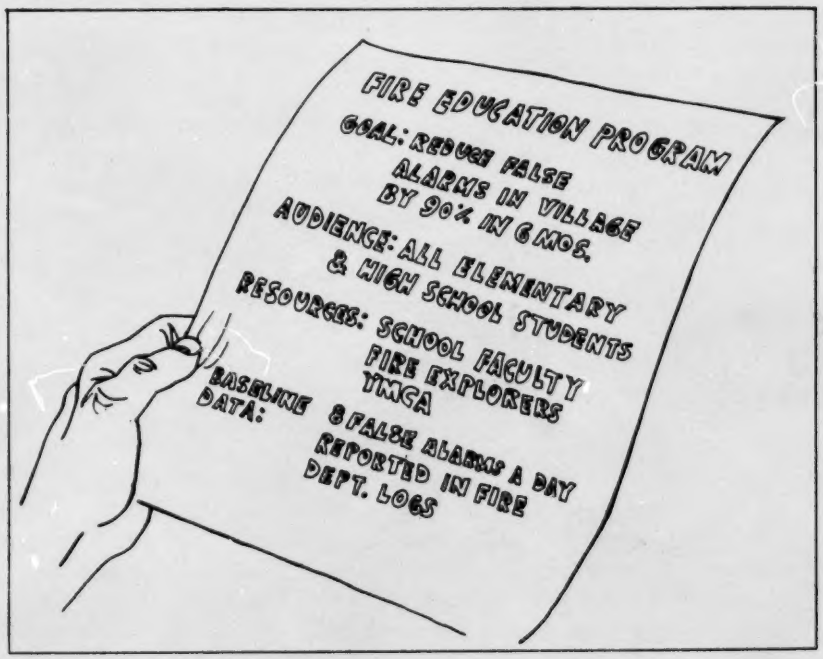
DECISION:
SELECT PROGRAM OBJECTIVES

- **Agree on specific and attainable educational objectives that are compatible with local resources and people.**
- **Agree on baseline data.**
- **Present a clear "image" of program objectives around which to mobilize the community.**

Since a specific local fire problem was identified in Step One, selection of program objective should focus on specific solutions to this problem. The objectives should be attainable within the limits of time, money, and available personnel. Wherever possible, the objectives should be measureable.

The analysis of costs and benefits should point to the best objective. If you find that you cannot solve the most serious problem with the resources available to you (i.e., you cannot attain your objective), you may revise your objective or return to Step One to identify the next most serious fire problem.

Agreeing on the baseline data—the extent of a specific problem at the beginning of the education program—is an important part of Selection. Both loss data (the statistical extent of a problem) and educational data (surveys of appropriate fire safety knowledge) can be part of your baseline data on a particular problem. This baseline figure will be carefully monitored during the program. A change from the baseline, measured during Evaluation, is one of the best indications that a public education program is, in fact, working.


FIRE EDUCATION PROGRAM
GOAL: REDUCE FALSE ALARMS IN VILLAGE BY 90% IN 6 MOS.
AUDIENCE: ALL ELEMENTARY & HIGH SCHOOL STUDENTS
RESOURCES: SCHOOL FACULTY
FIRE EXPLORERS
YMCA
BASELINE DATA:
8 FALSE ALARMS A DAY REPORTED IN FIRE DEPT. LOGS

SELECT PROGRAM OBJECTIVES

STEP THREE: DESIGN

Objective: To design and develop effective educational program materials.

The Design step is the bridge between planning a fire education program and implementing it in the field. This is the stage when final decisions are made about specific messages, formats, and times and places for distribution to the target audiences. At this time, the fire educator decides what to say and how to say it, and puts the program into a package that can be used by everyone involved in the effort.

Public fire education programs across the country have successfully used local talent to design and produce materials. From the APBIC Burn Prevention Program in Boston to the Pre-school Program is Stillwater, Okla., to the "House of Hazards" of Prince Georges County, Md., local fire educators have shown great creativity in designing effective materials.

ACTIVITY: DETERMINE MESSAGE CONTENT

- **Direct messages toward specific hazards.**
- **Appeal to positive motives.**
- **Show the context of the problem and desired behavior.**

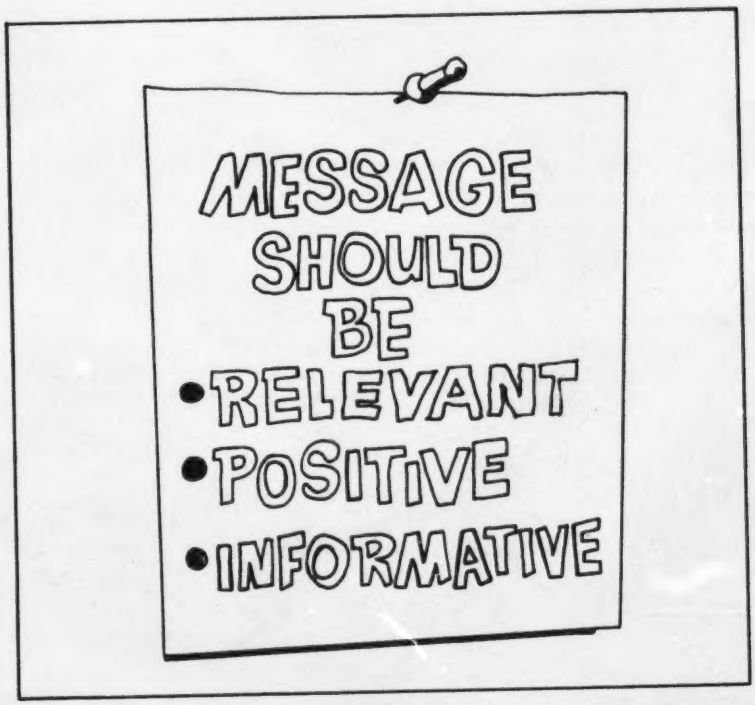
The content of the messages must be designed to solve the specific fire problems identified in the first step of the planning process. The key principles of designing effective fire safety messages were investigated in "A Study of Motivational Psychology Related to Fire Prevention Behavior in Children and Adults," for the National Fire Protection Association's Dick Van Dyke "Learn Not to Burn" campaign. These principles are:

1) Appeal to existing motives that people have for being fire safe; don't threaten them;
2) Be explicit about proper behavior and specific in directing messages to particular groups;
3) Show people the situation you are talking about and tell them what to do.

The NFPA's "Learn Not to Burn" program has been based on these principles, and it has had a remarkable degree of success. Numerous cases have been documented in which people remembered the simple, clear messages they saw on television, and then responded correctly in fire situations.

There is increasing evidence that public fire education does work when people are taught how to recognize fire hazards, how to correct them, and how to react in fire situations.

DESIGN



DETERMINE MESSAGE CONTENT

ACTIVITY:
DETERMINE MESSAGE FORMAT

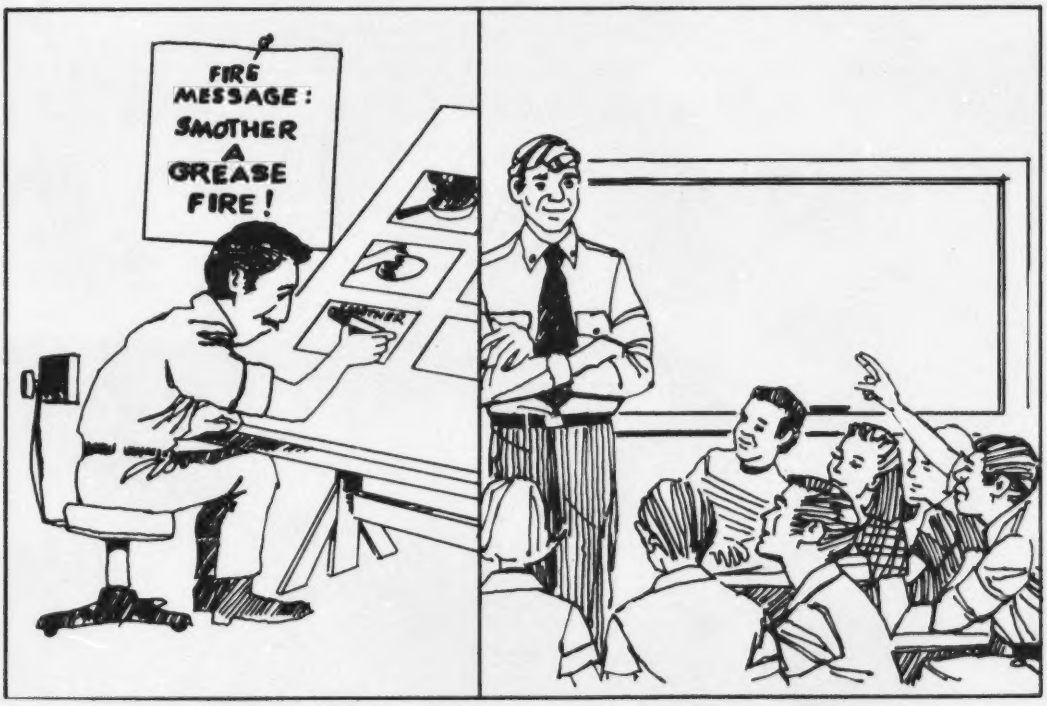
- **Match format to message.**
- **Match format to audience.**
- **Match format to resources.**

The best format for the selected messages depends on what is being communicated, to whom it is being communicated, and the resources available to the local fire educator.

Showing the correct behavior in a fire situation, for example, might best be done through a demonstration or on television. A printed home hazard check list is helpful for locating fire hazards in the home. A simple wall poster with strong graphics is best in commercial or industrial establishments. Film strips are valuable for teaching pre-schoolers with short attention spans. Longer films are effective in high schools.

The Massachusetts Firefighting Academy decided that teaching firefighters basic smoke detector information was the best way to reach the public, since firefighters often handle telephone inquiries about smoke detectors. The most appropriate format for their program was a self-instructing technical manual which could be used by students in a course and as a reference book in the station.

Ultimately, available resources are the determining factor in choosing a format which is both affordable and effective.



DETERMINE MESSAGE FORMAT

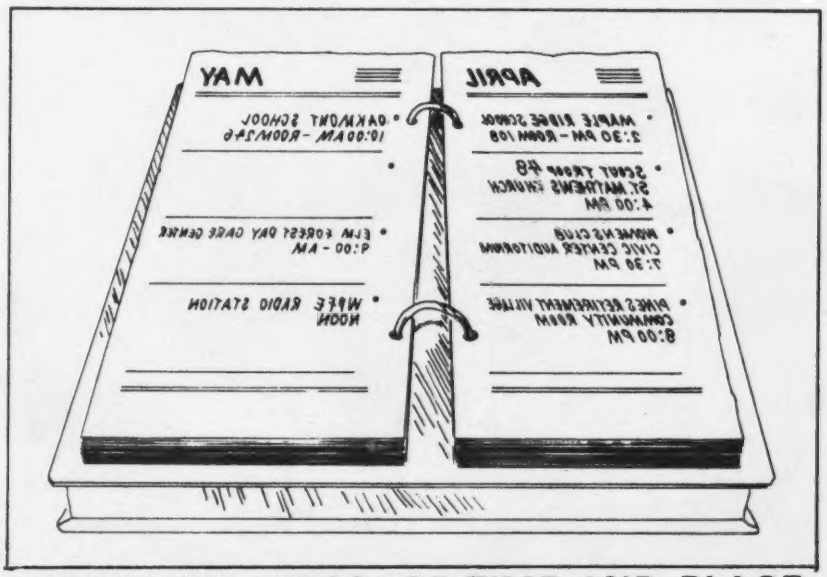
ACTIVITY: DETERMINE MESSAGE TIME AND PLACE

- **Determine when the target audiences will be most receptive to fire safety messages.**
- **Schedule messages for maximum effect.**

This inventory is intended to help the fire educator determine the best times and places to schedule messages for target audiences. For example, smoke detector advertisements in Los Angeles are scheduled for prime time evening hours when adult viewers (potential purchasers) are most likely to be watching television. In Miami, home inspections are scheduled for Saturday mornings, when people are at home, but before they begin watching sports events on television.

In conducting this inventory, the fire educator should consider the following:

1) Most television and radio stations subscribe to rating services which tell them when different types of people are watching or listening to specific programs. Frequently, the ratings data will be made available for planning fire education.
2) People are receptive to different types of fire education messages at different times in their lives and at different locations during the day. Take advantage of these facts by placing pamphlets on fire safety for children in the waiting rooms of pediatricians' offices or dropping leaflets about cooking fires in bags at supermarkets.
3) The best sources for information on how to reach specific groups are representatives of the groups themselves. Ask them when and how to reach their friends and neighbors.



DETERMINE MESSAGE TIME AND PLACE

DECISION: APPROVE PROGRAM PACKAGE

- **Design program package.**
- **Determine how materials will be produced.**
- **Present planned materials to sample audience.**

After making final decision about the format, content, and timing of the fire education messages, you must desigr. or purchase educational materials. This means putting the educational message into the slides, videotapes, posters, or brochures which will be most effective in your community.

In cities or towns with easy, direct contact between fire educators and their audiences, simple portable media like slide shows are often preferable. In larger cities, where direct contact is limited, packaging for the mass media may be more effective.

Once the materials have been designed or purchased, it is important to present the material to some people in the target audiences. These people will critique the material and you can observe their reactions.

The most effective program materials package must be adapted to local audiences and local problems. When you are confident that the materials have been tested and will work, the Implementation phase can begin.

APPROVE PROGRAM PACKAGE

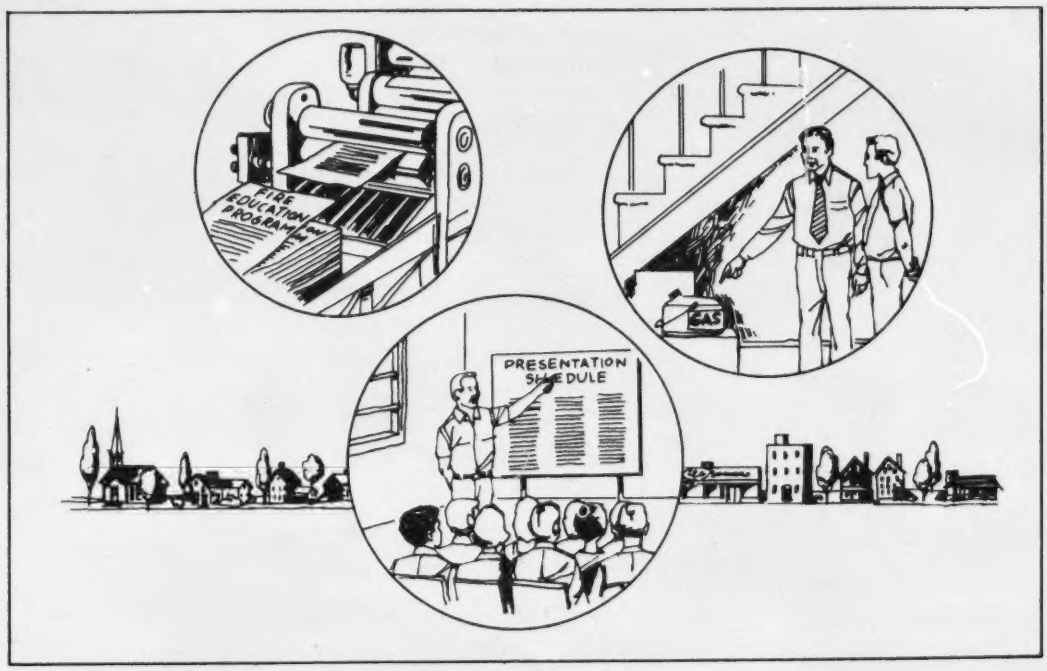
STEP FOUR: IMPLEMENTATION

Objective: To effectively implement the public fire education program plan.

Participation is the key to successful implementation of a public fire education program. The broad-based membership of the Fire Education Planning Team and the Fire Education Committee began local involvement in your community.

But participation and cooperation are needed from other sections of the community as well. The uniformed firefighter needs to become involved, as do the nurses and doctors in burn treatment centers, and the target audiences for prevention messages. Each of these people can bring a needed "personal touch" to the education program.

Fire prevention is not only a local problem, it is also a local process. Like every other activity at the local level, people's involvement is the key to the program's success.



IMPLEMENTATION

ACTIVITY: PRODUCE AND DISTRIBUTE MATERIALS

- **Assign production responsibilities.**
- **Produce or purchase materials.**
- **Distribute materials to target audiences.**

The basic goal of the entire fire education program is providing fire information to the public at large, and especially to high risk target audiences.

In Los Angeles, for example, the Fire Department worked with the local television station to produce a four-part documentary on smoke detectors and fire in the home. In this case, production and distribution were handled by the station, with assistance from Fire Department advisors. In Ohio, a statewide committee on fire safety designed and produced its own slide presentation on smoke detectors and home escape procedures; extension agents assisted in distribution. The same group is now working on fire education materials for children.

In other communities, community college art classes or media classes are asked to produce educational materials. Adopting model programs tested in other communities is another very effective solution. Frequently, civic groups or fast food chains will produce and distribute fire education materials as a service to the community.

Many communities also purchase their educational materials from the National Fire Protection Association (NFPA) or participate in the Hartford Junior Fire Marshal Program.

PRODUCE AND DISTRIBUTE MATERIALS

ACTIVITY: TRAIN AND SCHEDULE FIRE EDUCATORS

- **Organize fire service personnel and volunteers.**
- **Train people for their job.**
- **Match community "contacts" with target audiences.**

Where do you find the people to implement the fire education program? There are many possible answers to this question, each one growing out of specific local circumstances.

In Mt. Prospect, Ill., public education is considered a part of the uniformed firefighter's job. Fire service personnel perform a number of public education activities throughout the year, with a very positive effect on the city's fire rate.

In Edmonds, Wash., civilians were hired with CETA funds to conduct a Home Safety Survey Program, a home inspection effort which has reduced home fires in Edmonds by 69 percent. When CETA funding became unavailable, the Fire Department recruited and trained elderly volunteers to survey Edmonds' homes. In Delaware, the State Fire School has organized teachers, pre-school specialists, nursing home personnel, and wives of volunteer firefighters to carry out community fire education. The school has designed and taught two-day courses for Fire Safety Instructors.

People can be found, motivated, and trained to teach fire safety courses which they have never taught before—and to do it very well.

TRAIN AND SCHEDULE FIRE EDUCATORS

ACTIVITY: OBTAIN AUDIENCE PARTICIPATION AND COOPERATION

- **Involve target groups in implementing programs.**
- **Tell target audiences what to expect.**
- **Reinforce messages through endorsement by local opinion leaders.**

The selected audiences for public fire education programs should always be active participants in the education process. Early participation by these groups helps ensure acceptance of the education program, rather than creating resistance to it.

In Tampa, Fla., the Fire Department organized senior citizens into mutual assistance fire safety brigades. In Edmonds, Wash., homeowners received letters with their water bills, notifying them that the fire survey team would be visiting them soon. The notice also requested the recipients' cooperation in the survey. The result was a near-90 percent entry rate into Edmonds' homes, a very high percentage for home inspection programs. Explanations and endorsements by a Spanish-speaking priest increased the entry rate in a similar program in Chicago's Spanish-speaking neighborhoods.

Fire educators should remember that:

1) Effective communication is often a two-step process. Messages received through the mass media are far more effective when reinforced by opinion leaders respected in the high risk group or by the community as a whole.
2) Participation and cooperation by the community at every possible level is a fundamental principle of Implementation.

DECISION: MONITOR AND MODIFY PROGRAM

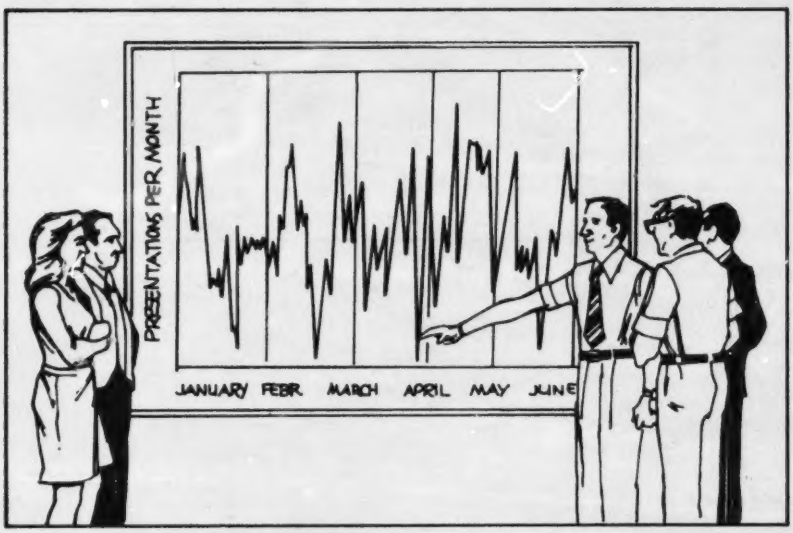
- **Observe program operation on a day-to-day basis.**
- **Modify program on the basis of the review.**

Day-to-day monitoring of the program during Implementation permits routine adjustments to be made. A more formal review should be undertaken at intervals of 6 months or more so that more substantial changes can be made.

The Chicago Fire Prevention Bureau, in cooperation with the local sanitation department, began a neighborhood clean-up program called "Operation Pride." The plan was for voluntary home inspections to be followed, a few days later, by extra garbage pick-ups. When the sanitation department was unable to provide trucks to meet the enormous public response, the Bureau modified the program by concentrating on fewer neighborhoods with the highest fire incidence rates.

The ability to be flexible and to change a program after it has begun is an essential characteristic of the public fire educator.

OBTAIN AUDIENCE PARTICIPATION & COOPERATION



MONITOR AND MODIFY PROGRAM

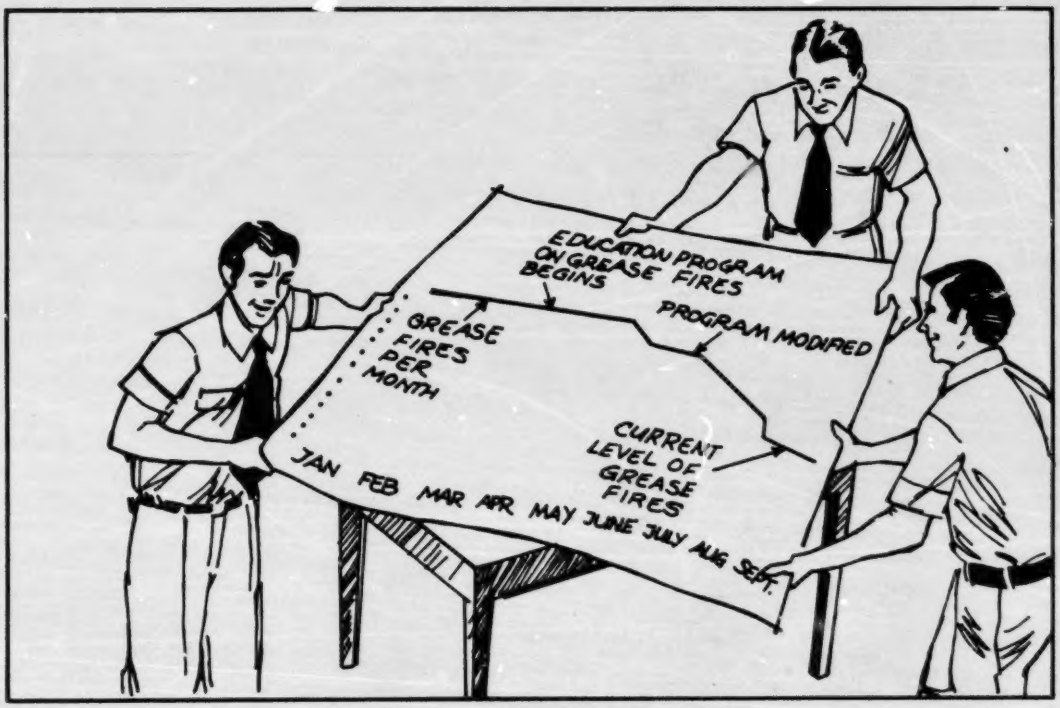
STEP FIVE: EVALUATION

Objective: To measure the impact of the public fire education program and modify the program if necessary.

Evaluation provides the planners with information once the program is underway. If the program has been effective, more resources can be committed. If not, the program can be revised.

In Louisiana, for example, sociologists working with the U.S. Forest Service found that programs using the mass media effectively communicated information, but did not influence behavior. They found that their target audiences required face-to-face reinforcement of the fire message before they would respond to it. The program was redesigned, using a "contactor" approach. Evaluation showed a 55 percent reduction in set fires in one year.

Evaluation is a very valuable tool. It not only measures impact, but also feeds back information so that program modifications can be made to ensure future success.


EDUCATION PROGRAM ON GREASE FIRES BEGINS
PROGRAM MODIFIED
GREASE FIRES PER MONTH
CURRENT LEVEL OF GREASE FIRES
JAN FEB MAR APR MAY JUNE JULY AUG SEPT.

EVALUATION

ACTIVITY: COMPARE NEW DATA WITH BASELINE DATA

- **Make new measurements.**
- **Compare with baseline loss data.**
- **Compare results with overall program objectives.**

What is the impact of public fire education? Comparing loss and educational data before and after implementing education programs provides a generally reliable measurement of the effectiveness or impact of education.

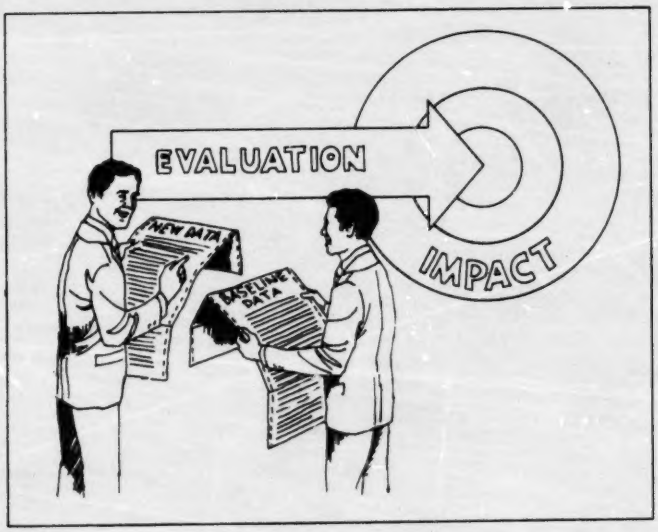
One method of measuring program impact is comparing loss statistics (death, injury, incidence, and property loss) before, during, and after an education program. For example, death declined between 43 percent and 63 percent in pilot projects conducted by the U.S. Department of Health, Education, and Welfare in Missouri, Arkansas, and North Carolina. In Santa Ana, Calif., a 60 percent reduction in per capita fire loss has been recorded. The USFA's NFIRS System is a valuable tool in making this type of comparison.

Evaluating a public fire education program should also include measurement of changes in fire safety awareness, knowledge, and behavior. Ways of measuring these "educational changes" include:

1) Comparing scores of questionnaires before and after a program. This not only provides information to the fire educator, but also reinforces the public's increased knowledge.
2) Conducting telephone surveys of those attending presentations to determine how behavior has changed, e.g., purchasing smoke detectors.

Changes in fire risk, such as the number of hazards per home, can also be measured.

This new data will not only illustrate the impact of the education program, but can also serve as baselines for future programs.



DECISION: EVALUATE PROGRAM IMPACT

- **Summarize results from all evaluation.**
- **Decide how to change and improve program.**
- **Return to Identification or Selection phase.**

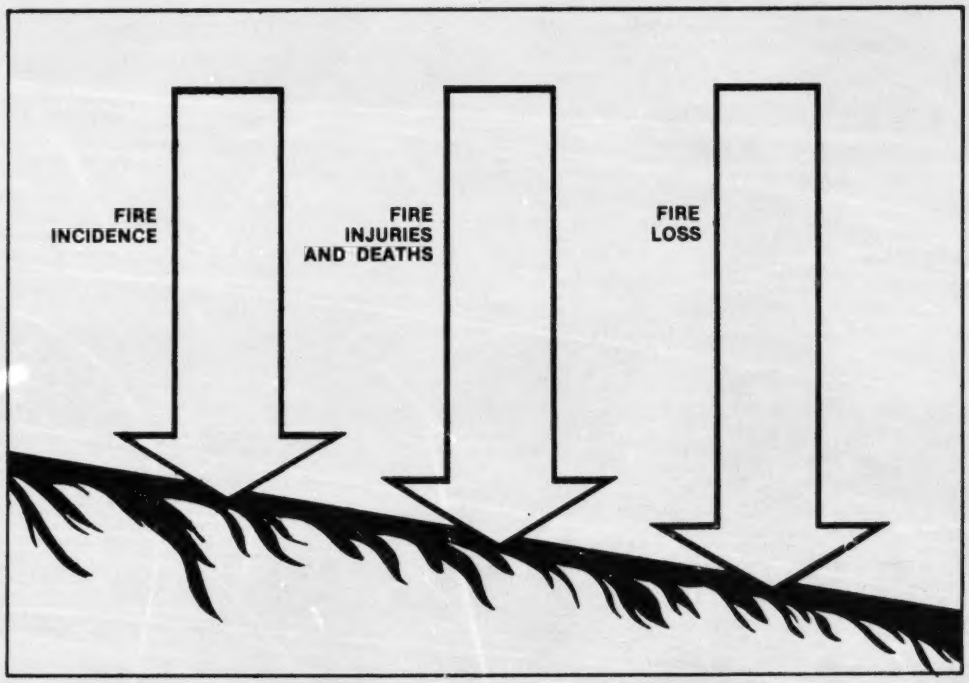
A careful evaluation will point to very specific ways of improving a public fire education program. These suggestions for improvement can then serve as clear recommendations for further planning and implementation.

The following are some hypothetical examples:

1) "Since our campaign began, deaths from careless cigarette smoking have been cut in half, which was our objective. Recommended that we now begin to concentrate on space heaters."
2) "Knowledge of flammable liquid dangers has increased since the program was implemented, but behavior has not changed. Recommend we try a 'personal contactor' program."
3) "Objectives for distribution of material are not being reached. Recommend we hire more personnel."

Once the Evaluation phase has produced new, specific recommendations, the fire educator returns to Identification for a new problem or to the Selection phase for new education strategies, correcting areas of weakness and supplementing areas of strength.

The entire process has now been completed and begins once again.



EVALUATE PROGRAM IMPACT

APPENDICES

THE OREGON EXPERIENCE

A diverse group of Oregon residents—including fire service personnel, a nurse, an insurance investigator, a public health official, forestry personnel, and others—were the first fire educators to apply the Public Fire Education Planning process statewide. Their experiences provide valuable insights on how the planning process works.

The Oregon Situation

Oregon has 17 fire protection districts linking local and state authorities. In addition, the statewide Fire Standards and Accreditation Board created a 15-member Fire Prevention Education Committee to oversee the fire prevention/education work of the Board's District Liaison Officers. At two conferences District Liaison Officers and Committee members formed working groups of about 10 people. The District Liaison Officers have undertaken local staff functions and the statewide Committee has served as an administrative and policymaking body.

Planning Insights

1. *Pre-conference work by the participants is essential to successful planning meetings.*

Before the conference, District Liaison Officers completed a questionnaire identifying their district's fire problems. To obtain the information, they talked with municipal fire chiefs, fire marshals and others in their district. When the delegates convened for the first meeting, they were active rather than passive, ready to share information as well as listen.

2. *Participants should be briefed on the five-step process before working sessions begin.*

An introduction to the five steps provides a "road map" of the planning process. The overview should include definitions to eliminate confusion over terms.

The assigned group leaders should receive an extensive briefing to enable them to function effectively.

3. *There should be a "referee" to explain terms and answer questions.*

Although a referee was not designated at the first Oregon conference, this need was filled at the second meeting. The referee should be comfortable enough with the five-step process to float from table to table to clarify procedures and define terms.

4. *The roles of local and state delegates must be clearly defined.*

In Oregon, the goal was to define the *state's* most serious fire problem, based on the initial gathering of local information. The question arose, "Where should the District Liaison Officer's energy be directed if state and local problems differ?" This issue was resolved by emphasizing the state perspective and suggesting that the District Liaison Officers also begin the planning process at the local level.

5. *A previously prepared data base is valuable in focusing the working sessions and in ensuring that baseline data are established early in the planning process.*

The Oregon fire educators relied on the State Fire Marshal's annual report as the primary data source, with local statistics gathered by the District Liaison Officers as a secondary data source. Baseline data should be emphasized, since this information is critical to Evaluation.

6. *Including a broad mix of people is helpful in avoiding "tunnel vision."*

A member of the fire service made this observation in Oregon. Participants felt that a mix of styles, perspectives and experiences contributed to information sharing. In addition, the mix helped the working groups explore new areas of mutual concern.

7. *Organizers must determine whether the conference should be "low key" or "high performance."*

At different times during the Oregon conference, the atmosphere shifted from low key (when the participants set their own pace) to high performance (when time pressures were great).

Either approach can be successful. The low key method emphasizes in-depth planning and may result in less work being completed, but greater consensus being achieved.

Several other states, including Illinois, Delaware, and California, have begun using the Public Fire Education Planning process. Training sessions on using the systematic planning process have been conducted in more than 25 states.

PUBLIC FIRE EDUCATION PLANNING
WORKSHEET 1
IDENTIFICATION

Objective: To identify major local fire problems.

Activities: Answer the following questions about your community's fire problems.

What are the major fire hazards?

- CARELESS SMOKING
- KITCHEN GREASE FIRES
-
-

Where are the high risk locations?

- NORTHEAST SECTION OF TOWN
- BAT. #3
- SUDBURY APTS.
-

When are the high risk times?

- WEEKENDS
- NIGHTS (10-2a.m.)
- KITCHEN-EARLY EVENING
-

Who are the high risk victims?

- ADULT MALES (SMOKING)
- ADULT FEMALES
-
-

What is the high risk behavior?

- SMOKING AND DRINKING
- LEANING THE STOVE
-
-

Decision: Agree on major fire problems in your community.

RESIDENTIAL FIRES STARTED BY SMOKING/DRINKING, ESPECIALLY IN BAT. 3 AREA; USUALLY AT NIGHT AND ON WEEKENDS.

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 1 IDENTIFICATION

Objective: To identify major local fire problems.

Activities: Answer the following questions about your community's fire problems.

What are the major fire hazards?

-
-
-
-

Where are the high risk locations?

-
-
-
-

When are the high risk times?

-
-
-
-

Who are the high risk victims?

-
-
-
-

What is the high risk behavior?

-
-
-
-

Decision: Agree on major fire problems in your community.

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 2 SELECTION

Objective: To select the most cost-effective objectives for your education program.

Activities: Answer the following questions about your community.

Who are your potential audiences?

- PEOPLE WHO LIVE IN BATTALION #3 AREA
- ADULTS, ESPECIALLY MALES
-
- APT. RESIDENTS

What are your community resources (civic groups, media, etc.)?

- LIONS, KIWANIS, K OF C
- SUDBURY TENANTS ASSOCIATION
- CEMENT PLANT (EMPLOYES SUDBURY RESIDENTS)
- WPFE RADIO

What materials can you use?

- SMOKE DETECTOR FILM
- SMOKE DETECTOR BROCHURE
- (FROM USFA)
-

Estimate costs and benefits of the various education programs.

- REPRINT 5,000 COPIES OF BROCHURE FOR $500
- NEW SLIDE SHOW $500
- NOW 12 RUNS A MONTH TO SUDBURY APTS;
- 78 SMOKING FIRES

Decision: Select achievable objectives.

- TO REDUCE SMOKING FIRES IN SUDBURY
- BY 50% IN 6 MONTHS; TO HAVE
- RESIDENTS INSTALL 500 SMOKE DETECTORS IN SIX MONTHS
- THROUGH ED. PROGRAM ON SMOKING FIRES & DETECTORS. USE 78 SMOKING FIRES AS BASELINE

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 2 SELECTION

Objective: To select the most cost-effective objectives for your education program.

Activities: Answer the following questions about your community.

Who are your potential audiences?

-
-
-
-

What are your community resources (civic groups, media, etc.)?

-
-
-
-

What materials can you use?

-
-
-
-

Estimate costs and benefits of the various education programs.

-
-
-
-

Decision: Select achievable objectives.

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 3 DESIGN

Objective: To design and develop effective educational program materials.

Activities: Answer the following questions about your community.

What is your primary message?

- SMOKE SAFELY--BUY A SMOKE DETECTOR
-
-
-

Which formats are best to present your message?

- PRESENTATIONS TO LOCAL GROUPS
- DISTRIBUTE BROCHURE
- SHOW SLIDE SHOW OR MOVIE
- (DEPENDING ON THE GROUP)

When are the best times and places to present your message?

- JUST BEFORE PAYDAY -- SO PEOPLE CAN
- BUY DETECTORS SOON!
- SCHEDULED MEETINGS OF LOCAL GROUPS
- IN THE NEIGHBORHOOD

Decision: Specify your education program package.

SMOKE DETECTOR PRESENTATIONS AT MEETINGS OF LOCAL GROUPS. REINFORCE MESSAGE WITH SLIDE SHOW OR MOVIE. SEND BROCHURES HOME WITH THE AUDIENCE

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 3 DESIGN

Objective: To design and develop effective educational program materials.

Activities: Answer the following questions about your community.

What is your primary message?

-
-
-
-

Which formats are best to present your message?

-
-
-
-

When are the best times and places to present your message?

-
-
-
-

Decision: Specify your education program package.

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 4 IMPLEMENTATION

Objective: To effectively implement the public fire education plan.

Activities: Answer the following questions about your education program.

How will you produce your materials?

- SGT. MILLER TO MAKE NEW SLIDE SHOW
- LT. THOMAS TO GET BROCHURE PRINTED IN CITY SHOP

How will the materials be distributed?

- AS PART OF PRESENTATIONS
- SCOUT TROOP 48 TO DISTRIBUTE ADDITIONAL BROCHURES

Who will train and schedule the fire educators in your community?

- SGT. MILLER IS RESPONSIBLE

How will you obtain participation and cooperation from target groups in implementing the education program?

- LIONS PRESIDENT TO FORM COMMITTEE
- MAYOR JONES TO ENDORSE DETECTORS ON RADIO WPFE "SPOT" PSA

Decision: State how the public education program will be implemented and monitored in your community.

-- THE PROGRAM WILL BE IMPLEMENTED IN 6 WEEKS WITH HELP FROM LIONS CLUB, TROOP 48, ETC.

-- SGT. MILLER TO KEEP CHART OF ALL CONTACT WITH THE PUBLIC ON SMOKE DETECTORS (WHEN, WHERE, WHO, ANY PROBLEMS)

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 4 IMPLEMENTATION

Objective: To effectively implement the public fire education plan.

Activities: Answer the following questions about your education program.

How will you produce your materials?

-
-
-
-

How will the materials be distributed?

-
-
-
-

Who will train and schedule the fire educators in your community?

-
-
-
-

How will you obtain participation and cooperation from target groups in implementing the education program?

-
-
-
-

Decision: State how the public education program will be implemented and monitored in your community.

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 5 EVALUATION

Objective: To measure the impact of the public education program and modify the program if necessary.

Activities:

How will you measure reduced fire deaths, injuries, loss, and incidence?

- BAT. #3 LOGS WILL BE COMPARED WITH
- BASELINE AFTER 3, 6, 9, AND 12 MONTHS.
-
-

How will you measure changes in knowledge, awareness and

- COMMUNITY POLL TO SEE HOW MANY
- SMOKE DETECTORS ARE INSTALLED.
-
-

Decision: State the impact of the public education program in your community.

FIRE INCLIDENCE DOWN TO 32! 800 DETECTORS INSTALLED!

Determine to return to Identification (to define new problems) or to Selection (to select new strategies and objectives).

PUBLIC FIRE EDUCATION PLANNING WORKSHEET 5 EVALUATION

Objective: To measure the impact of the public education program and modify the program if necessary.

Activities: Answer these questions about your education program

How will you measure reduced fire deaths, injuries, loss, and incidence?

-
-
-
-

How will you measure changes in knowledge, awareness and

-
-
-
-

Decision: State the impact of the public education program in your community.

Determine to return to Identification (to define new problems) or to Selection (to select new strategies and objectives).

Acknowledgements

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